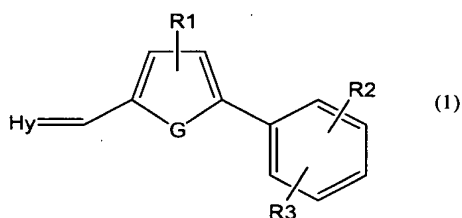


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

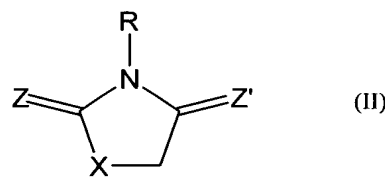
1. (Currently Amended) A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers or increasing the density of keratinous fibers in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom,

~~wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):~~

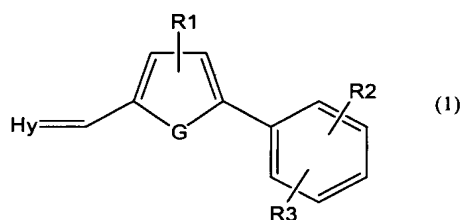


~~where R, R', R'' and R', which are identical or different, denote Z and Z' independently represent S or O, X independently represents S or O or NH, R denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;~~

- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', [[NR₀C(=NR₀')NR₀'R₀']] NR₀C(=NR₀')NR₀'R₀'', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀'', COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted,~~ where R₀, R₀', R₀' and [[R₀']]R₀'', which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, ~~wherein the alkyl or aryl radical is optionally substituted.~~

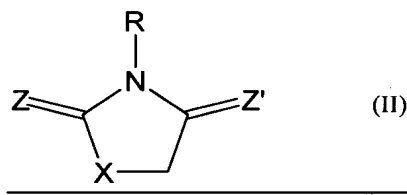
2. (Currently Amended) A method of caring for human keratinous fibers, or inducing and/or stimulating the growth of human keratinous fibers, or

slowing the loss of human keratinous fibers and/or increasing the density of human keratinous fibers and/or treating androgenic alopecia in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where ~~R, R', R'' and R', which are identical or different, denote Z and Z'~~

~~independently represent S or O, X independently represents S or O or NH, R~~

~~denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,~~

~~wherein the alkyl or aryl radical is optionally substituted;~~

- G represents O, S or NH;

- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an

OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀",

[[NR₀C(=NR₀')NR₀"R₀']] NR₀C(=NR₀')NR₀"R₀", OCOR₀, COSR₀, SCOR₀,

CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN,

NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched

C₁-C₂₀ alkyl radical, an unsaturated linear or branched

C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms

~~optionally comprising at least one heteroatom, wherein the rings are separate or~~

~~fused, further wherein the alkyl radicals and the rings are optionally substituted,~~

where R₀, R₀', R₀" and [[R₀']]R₀", which are identical or different, denote a

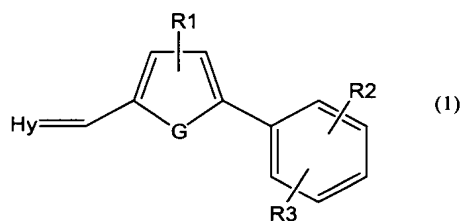
hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, ~~wherein the~~

~~alkyl or aryl radical is optionally substituted.~~

3. (Cancelled)

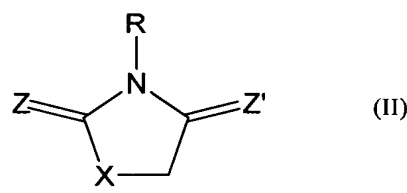
4. (Currently Amended) A method of inhibiting

15-hydroxyprostaglandin dehydrogenase in a subject in need of same, said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where ~~R, R', R'' and R'~~, which are identical or different, denote Z and Z'

independently represent S or O, X independently represents S or O or NH, R

denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,

wherein the alkyl or aryl radical is optionally substituted;

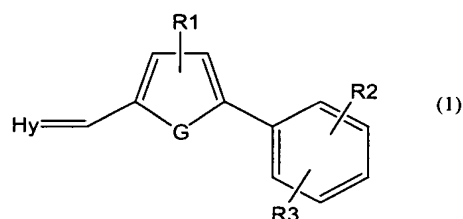
- G represents O, S or NH;

- R_1 , R_2 and R_3 represent, independently of one another, a hydrogen, a halogen, an OR_0 , SR_0 , NR_0R_0' , COR_0 , CSR_0 , $NR_0CONR_0'R_0''$, $C(=NR_0)R_0'$, $C(=NR_0)NR_0'R_0''$, $[[NR_0C(=NR_0')NR_0''R_0''']]$ $NR_0C(=NR_0')NR_0''R_0'''$, $OCOR_0$, $COSR_0$, $SCOR_0$, $CSNR_0R_0'$, NR_0CSR_0' , $NR_0CSNR_0'R_0''$, $COOR_0$, $CONR_0R_0'$, CF_3 , NO_2 , CN , NR_0COR_0' , SO_2R_0' , $SO_2NR_0R_0'$ or $NR_0SO_2R_0'$ group, a saturated linear or branched C_1 - C_{20} alkyl radical, an unsaturated linear or branched C_1 - C_{20} alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at least one heteroatom~~, wherein the rings are separate or fused, ~~further wherein the alkyl radicals and the rings are optionally substituted~~, where R_0 , R_0' , R_0'' and $[[R_0''']]R_0'''$, which are identical or different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical, ~~wherein the alkyl or aryl radical is optionally substituted~~.

5. (Cancelled)

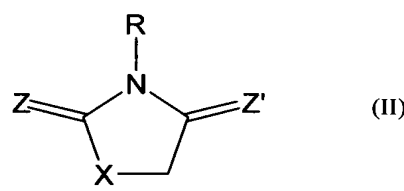
6. (Previously Presented) The method of claim 1, wherein the keratinous fibers are the hair, eyebrows, eyelashes, beard hairs, moustache hairs and pubic hairs.

7. (Currently Amended) A method of reducing hair loss and/or increasing hair density and/or treating androchronogenetic alopecia and/or treating alopecia of natural origin in a subject in need of same; said method comprising applying to said subject a cosmetic or pharmaceutical composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where ~~R, R', R'' and R'~~, which are identical or different, denote Z and Z'

independently represent S or O, X independently represents S or O or NH, R

denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,

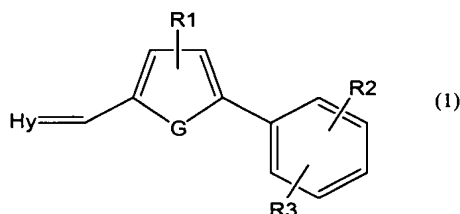
~~wherein the alkyl or aryl radical is optionally substituted;~~

- G represents O, S or NH;

- R_1 , R_2 and R_3 represent, independently of one another, a hydrogen, a halogen, an OR_0 , SR_0 , NR_0R_0' , COR_0 , CSR_0 , $NR_0CONR_0'R_0''$, $C(=NR_0)R_0'$, $C(=NR_0)NR_0'R_0''$, $[[NR_0C(=NR_0')NR_0''R_0''']]$ $NR_0C(=NR_0')NR_0''R_0'''$, $OCOR_0$, $COSR_0$, $SCOR_0$, $CSNR_0R_0'$, NR_0CSR_0' , $NR_0CSNR_0'R_0''$, $COOR_0$, $CONR_0R_0'$, CF_3 , NO_2 , CN , NR_0COR_0' , SO_2R_0' , $SO_2NR_0R_0'$ or $NR_0SO_2R_0'$ group, a saturated linear or branched C_1 - C_{20} alkyl radical, an unsaturated linear or branched C_1 - C_{20} alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted,~~ where R_0 , R_0' , R_0'' and $[[R_0''']]R_0'''$, which are identical or different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical, ~~wherein the alkyl or aryl radical is optionally substituted.~~

8. (Cancelled)

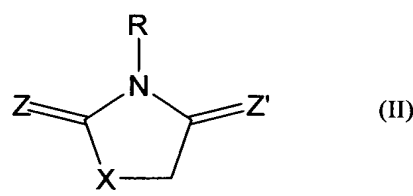
9. (Currently Amended) A method of inducing and/or stimulating the growth of eyelashes and/or increasing the density of eyelashes in a subject in need of same; said method comprising applying to said subject a cosmetic composition comprising an effective amount at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle ~~with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl~~

~~functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):~~



~~where R, R', R'' and R', which are identical or different, denote Z and Z' independently represent S or O, X independently represents S or O or NH, R denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;~~

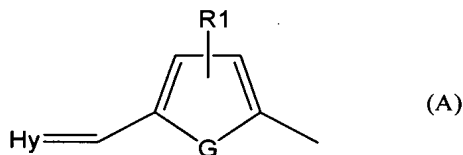
- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', [[NR₀C(=NR₀')NR₀'R₀']] NR₀C(=NR₀')NR₀'R₀'', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀'', COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at~~

~~least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R_0 , R_0' , R_0'' and $[[R_0']][R_0''']$, which are identical or different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted.~~

10. (Cancelled)

11. (Previously Presented) The method of claim 1, wherein in the compound of formula (I), the heteroatom or heteroatoms of Hy are selected from the group consisting of O, N or S.

12. (Currently Amended) The method of claim 1, wherein in the compound of formula (I), R_2 and R_3 are in the para- or meta-position with regard to the following part A:



13. (Previously Presented) The method of claim 1, wherein in the compound of formula (I), R_1 represents a hydrogen atom.

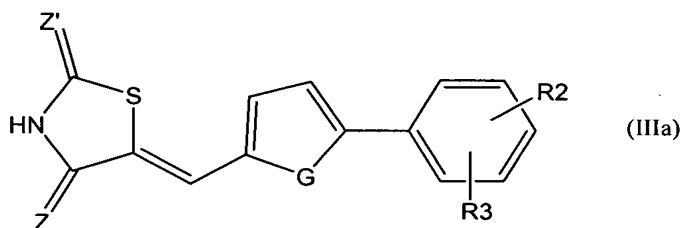
14. (Previously Presented) The method of claim 1, wherein in the compound of formula (I), at least one of the R_2 and R_3 groups represents CF_3 , OR_0 or $COOR_0$ with R_0 being H or a saturated or unsaturated, linear or branched, C_1 - C_{20} alkyl radical.

15. (Previously Presented) The method of claim 14, wherein in the compound of formula (I), $COOR_0$ represents $COOH$ or $COOCH_2-CH_3$.

16. (Previously Presented) The method of claim 1, wherein in the compound of formula (I), R_2 represents COOH and R_3 represents H ; R_2 represents $\text{COOCH}_2\text{-CH}_3$ and R_3 represents H ; or R_2 and R_3 represent CF_3 or OCH_3 .

17. (Previously Presented) The method of claim 1, wherein the compound of formula (I) comprises one or two carbonyl groups, wherein the carbon of the carbonyl group forms part of the heterocycle.

18. (Previously Presented) The method of claim 1 wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



in which Z , Z' and G independently represent O or S ; and at least one of the R_2 and R_3 groups represents CF_3 , OR_0 or COOR_0 with R_0 being H or a saturated or unsaturated, linear or branched, $\text{C}_1\text{-C}_{20}$ alkyl radical.

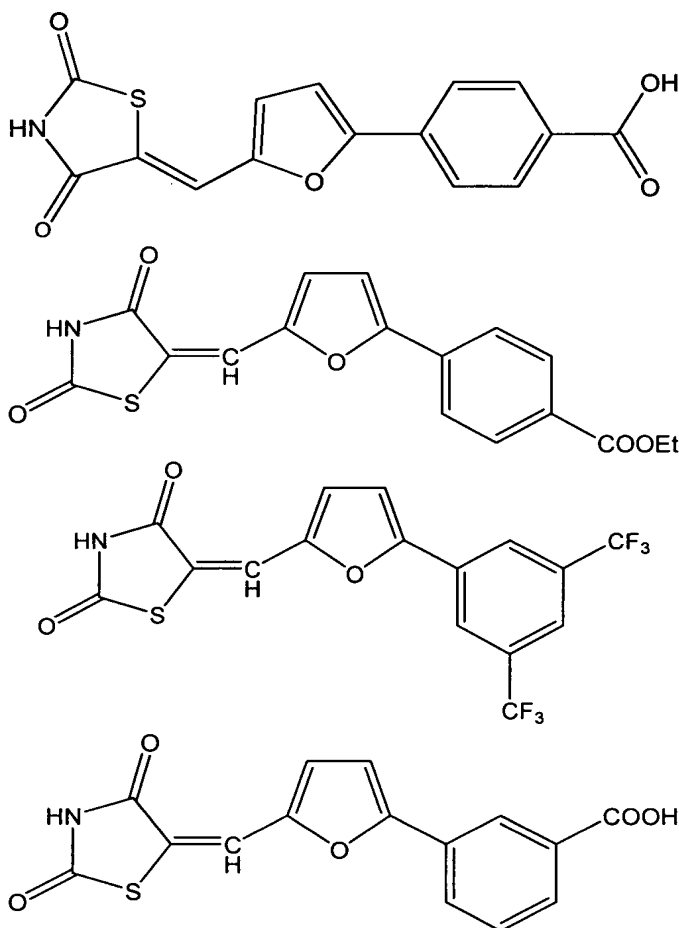
19. (Previously Presented) The method of claim 1 wherein the compound of formula (I) comprises a thiazolidinedione ring.

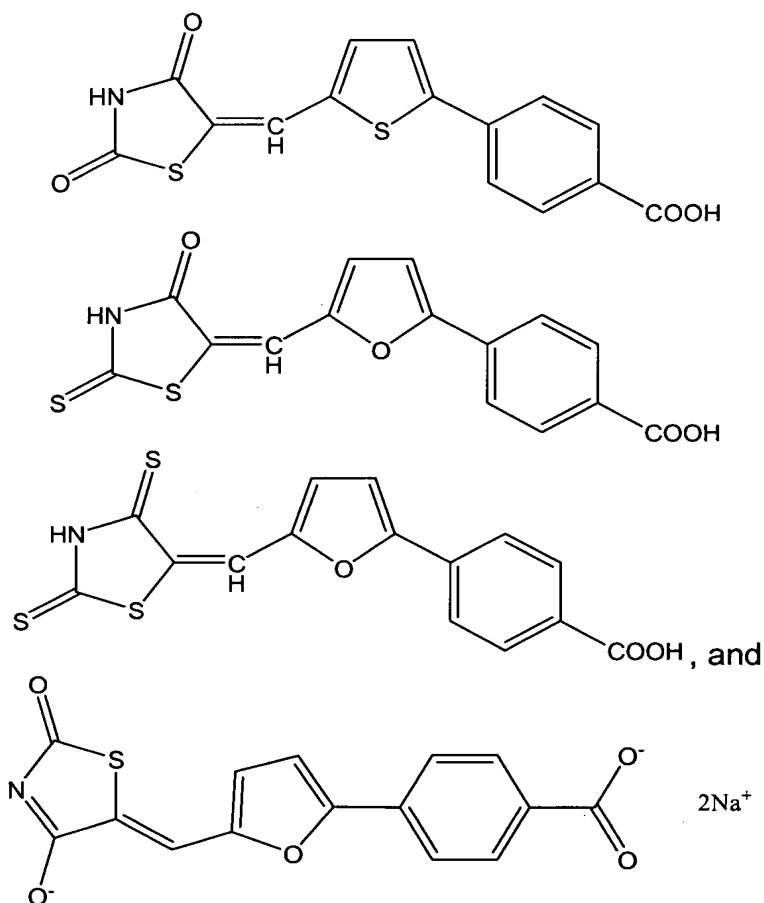
20. (Currently Amended) The method of ~~Claim~~ claim 18, wherein, when $Z = Z' = G$, at least one of the R_2 and R_3 groups represents CF_3 or COOR_0 with R_0 being a saturated, linear or branched, $\text{C}_1\text{-C}_{10}$ alkyl radical.

21. (Previously Presented) The method of claim 1, wherein the salt of the compound of formula (I) is a salt selected from the group consisting of sodium

salts, potassium salts, salts of zinc (Zn^{2+}), of calcium (Ca^{2+}), of copper (Cu^{2+}), of iron (Fe^{2+}), of strontium (Sr^{2+}), of magnesium (Mg^{2+}), of manganese (Mn^{2+}), of ammonium, triethanolamine, monoethanolamine, diethanolamine, hexadecylamine, N,N,N',N'-tetrakis(2-hydroxypropyl)ethylenediamine, tris(hydroxymethyl)aminomethane salts, hydroxides, carbonates, halides, sulphates, phosphates and nitrates.

22. (Previously Presented) The method of claim 1, wherein the compound of formula (I) is selected from the group consisting of:





23. (Previously Presented) The method of claim 1 wherein the

compound of formula (I) or a mixture of compounds of formula (I) is used at a concentration ranging from 10^{-3} to 10% with respect to the total weight of the composition.

24. (Previously Presented) The method of claim 1, wherein the

composition is applied topically.

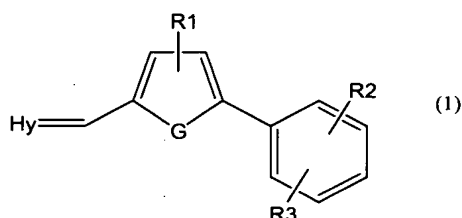
25.-47. (Cancelled)

48. (Currently Amended) A method for the cosmetic treatment of

keratinous fibers and/or of the skin from where the said fibers emerge in a subject in need of same, said method comprising applying, to the fibers and/or the skin of said subject, a composition as defined in ~~Claim~~ claim 1, leaving this composition in

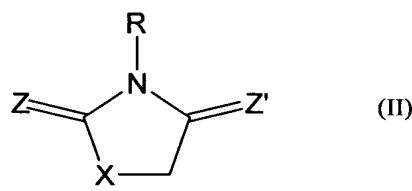
contact with the fibers and/or the skin and optionally rinsing, wherein the composition is a cosmetic composition.

49. . (Currently Amended) A method for improving the condition and/or appearance of human eyelashes in a subject in need of same, said method comprising applying to the eyelashes and/or eyelids of said subject a mascara composition comprising at least one compound of formula (I) or one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSP', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where R , R' , R'' and R''' , which are identical or different, denote Z and Z'

independently represent S or O, X independently represents S or O or NH, R

denotes a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical,

wherein the alkyl or aryl radical is optionally substituted;

- G represents O, S or NH;

- R_1 , R_2 and R_3 represent, independently of one another, a hydrogen, a halogen, an

OR_0 , SR_0 , NR_0R_0' , COR_0 , CSR_0 , $NR_0CONR_0'R_0''$, $C(=NR_0)R_0'$, $C(=NR_0)NR_0'R_0''$,

$[[NR_0C(=NR_0')NR_0''R_0''']]$ $NR_0C(=NR_0')NR_0''R_0'''$, $OCOR_0$, $COSR_0$, $SCOR_0$,

$CSNR_0R_0'$, NR_0CSR_0' , $NR_0CSNR_0'R_0''$, $COOR_0$, $CONR_0R_0'$, CF_3 , NO_2 , CN ,

NR_0COR_0' , SO_2R_0' , $SO_2NR_0R_0'$ or $NR_0SO_2R_0'$ group, a saturated linear or branched

C_1 - C_{20} alkyl radical, an unsaturated linear or branched C_1 - C_{20} alkyl radical, or at

least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at~~

~~least one heteroatom, wherein the rings are separate or fused, further wherein the~~

~~alkyl radicals and the rings are optionally substituted, where R_0 , R_0' , R_0'' and~~

~~$[[R_0''']]R_0'''$, which are identical or different, denote a hydrogen, a linear or branched~~

~~C_1 - C_{20} alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally~~

~~substituted,~~

and leaving this composition in contact with the eyelashes and/or eyelids.

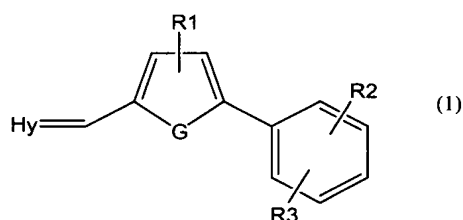
50. (Currently Amended) A method for improving the condition

and/or appearance of human scalp in a subject in need of same, said method

comprising applying to the hair and/or the scalp of said subject a cosmetic

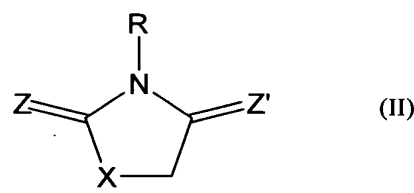
composition comprising an effective amount of at least one compound of formula (I)

or one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSP', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where R, R', R'' and R', which are identical or different, denote Z and Z'

independently represent S or O, X independently represents S or O or NH, R

denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,

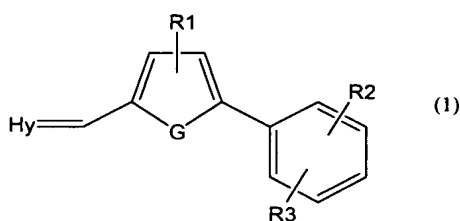
wherein the alkyl or aryl radical is optionally substituted;

- G represents O, S or NH;

- R_1 , R_2 and R_3 represent, independently of one another, a hydrogen, a halogen, an OR_0 , SR_0 , NR_0R_0' , COR_0 , CSR_0 , $NR_0CONR_0'R_0''$, $C(=NR_0)R_0'$, $C(=NR_0)NR_0'R_0''$, $[[NR_0C(=NR_0')NR_0''R_0''']]$ $NR_0C(=NR_0')NR_0''R_0'''$, $OCOR_0$, $COSR_0$, $SCOR_0$, $CSNR_0R_0'$, NR_0CSR_0' , $NR_0CSNR_0'R_0''$, $COOR_0$, $CONR_0R_0'$, CF_3 , NO_2 , CN , NR_0COR_0' , SO_2R_0' , $SO_2NR_0R_0'$ or $NR_0SO_2R_0'$ group, a saturated linear or branched C_1 - C_{20} alkyl radical, an unsaturated linear or branched C_1 - C_{20} alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at least one heteroatom~~, wherein the rings are separate or fused, ~~further wherein the alkyl radicals and the rings are optionally substituted~~, where R_0 , R_0' , R_0'' and $[[R_0''']]R_0'''$, which are identical or different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical, ~~wherein the alkyl or aryl radical is optionally substituted~~, and leaving this composition in contact with the hair and/or the scalp and optionally rinsing the hair and/or the scalp.

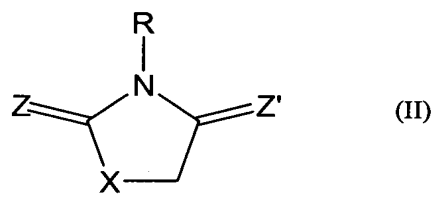
51.-57. (Cancelled)

58. (Currently Amended) A method of preserving the amount and/or the activity of prostaglandins in the hair follicle in a subject in need of same, said method comprising applying to the skin and/or hair of said subject a cosmetic composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R", C(=NR)R', C(=NR)NR'R", NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R", COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where R, R', R'' and R', which are identical or different, denote Z and Z' independently represent S or O, X independently represents S or O or NH, R denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;

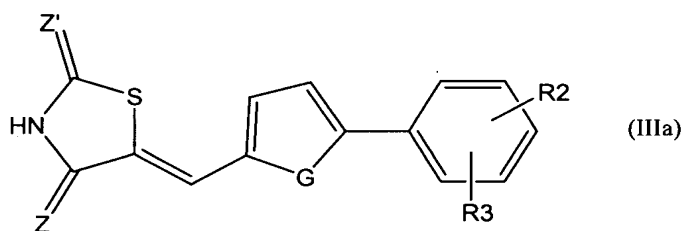
- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀", [[NR₀C(=NR₀')NR₀"R₀']] NR₀C(=NR₀')NR₀"R₀", OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched

~~C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R₀, R₀', R₀" and [[R₀']][R₀"], which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted,~~

59. (Cancelled)

60. (Previously Presented) The method of claim 1, wherein in the compound of formula (I), at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₁₀ alkyl radical.

61. (Previously Presented) The method of claim 1 wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



in which Z and Z' independently represent O or S and G represents O; and at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₁₀, alkyl radical.

62. (Currently Amended) The method of ~~Claim~~ claim 18, wherein, when $Z = Z' = G$, at least one of the R_2 and R_3 groups represents CF_3 or $COOR_0$ with R_0 being a saturated, linear or branched, C_1 - C_5 , alkyl radical.

63. (Currently Amended) The method of ~~Claim~~ claim 18, wherein, when $Z = Z'$ and Z and Z' are Z' are different from G , at least one of the R_2 and R_3 groups represents CF_3 or $COOR_0$, with R_0 being H .

64. (Previously Presented) The method of claim 1 wherein the compound of formula (I) or a mixture of compounds of formula (I) is used at a concentration ranging from 10^{-2} to 2%, with respect to the total weight of the composition.

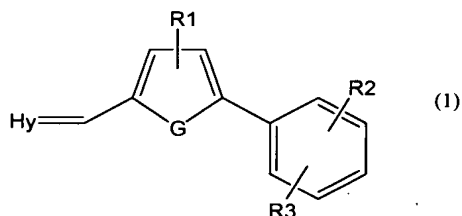
65. (Currently Amended) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of antiandrogens, cyclosporins ~~and their analogues~~, antimicrobials, antifungals, anti-inflammatories and retinoids.

66. (Previously Presented) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of aminexil, FP receptor agonists and vasodilators.

67. (Previously Presented) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of aminexil, minoxidil, latanoprost, butaprost and travoprost.

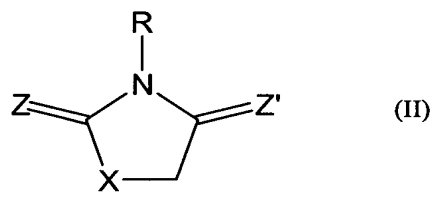
68. (Currently Amended) A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers in a subject in need of same; said method comprising applying to

said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₄-C₂₀ alkyl radicals, unsaturated linear or branched C₄-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, of formula (II):



where R, R', R'' and R', which are identical or different, denote Z and Z'
independently represent S or O, X independently represents S or O or NH, R
denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,
wherein the alkyl or aryl radical is optionally substituted;

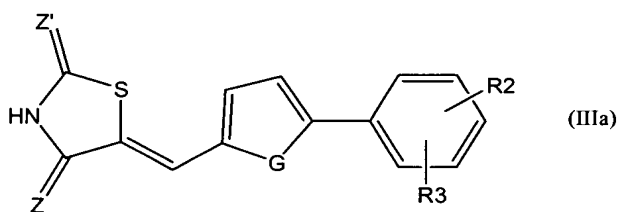
- G represents O;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀", [[NR₀C(=NR₀')NR₀"R₀']] NR₀C(=NR₀')NR₀"R₀", OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms ~~optionally comprising at least one heteroatom~~, wherein the rings are separate or fused, ~~further wherein the alkyl radicals and the rings are optionally substituted~~, where R₀, R₀', R₀" and [[R₀']]R₀", which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, ~~wherein the alkyl or aryl radical is optionally substituted~~.

69. (Previously Presented) The method of claim 68, wherein the keratinous fibers are the hair, eyebrows, eyelashes, beard hairs, moustache hairs and pubic hairs.

70. (Previously Presented) The method of claim 68, wherein the keratinous fibers are the hair.

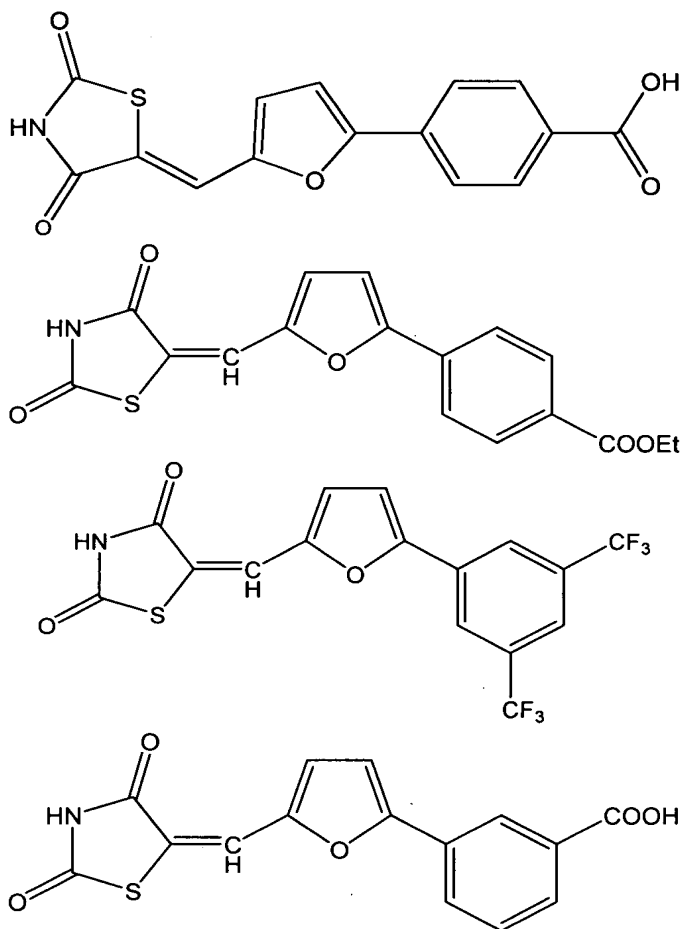
71. (Previously Presented) The method of claim 68, wherein the application of the composition is topical.

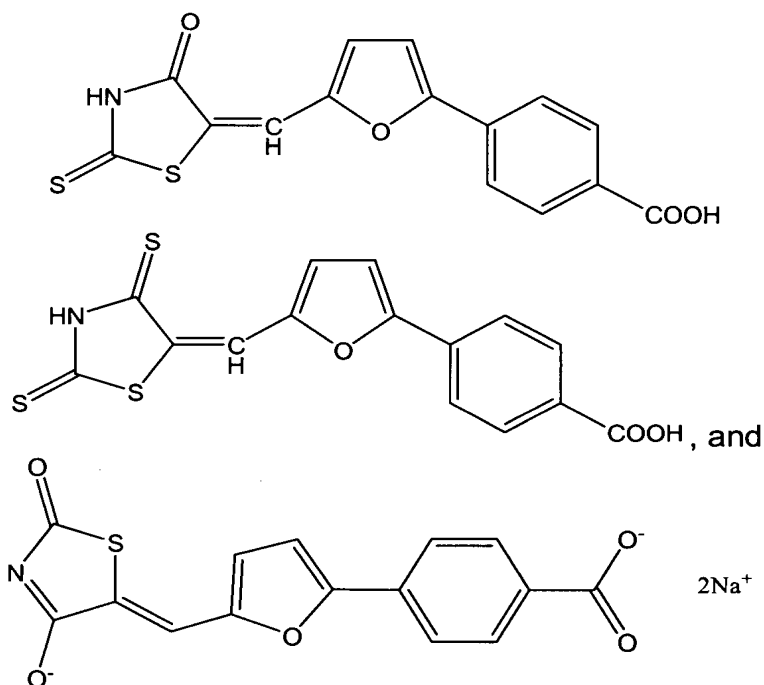
72. (Previously Presented) The method of claim 70, wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



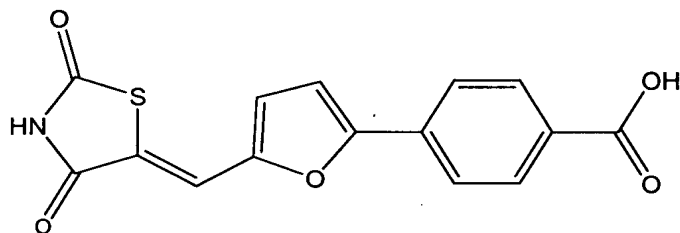
in which Z and Z' independently represent O or S and G represents O; and at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₁₀, alkyl radical.

73. (Previously Presented) The method of claim 70, wherein the heterocyclic compound of formula (I) is selected from the group consisting of:

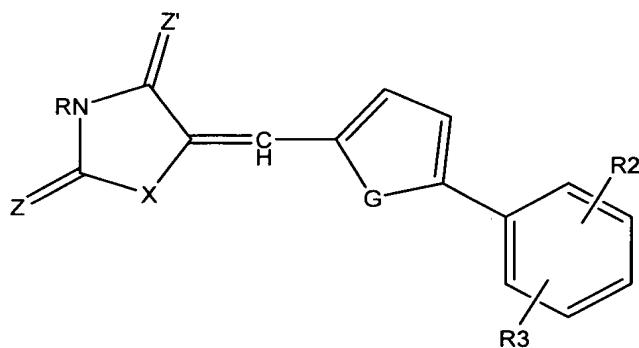




74. (Previously Presented) The method of claim 70, wherein the heterocyclic compound of formula (I) is:



75. (New) A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers or increasing the density of keratinous fibers in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of the formula:



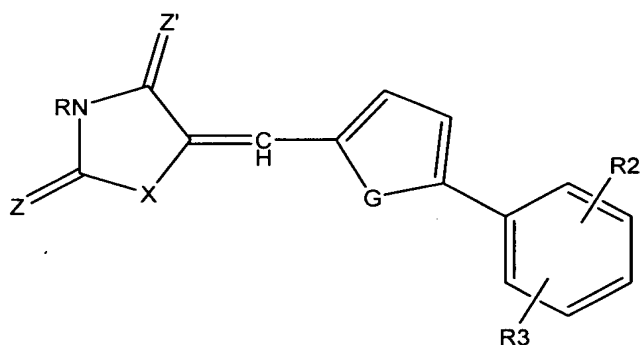
or of one of its salts, in which:

- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

76. (New) The method of claim 75, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, or a linear or branched C₁-C₂₀ alkyl radical.

77. (New) The method of claim 75, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

78. (New) A method of caring for human keratinous fibers, or inducing and/or stimulating the growth of human keratinous fibers, or slowing the loss of human keratinous fibers and/or increasing the density of human keratinous fibers and/or treating androgenic alopecia in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of the formula:



or of one of its salts, in which:

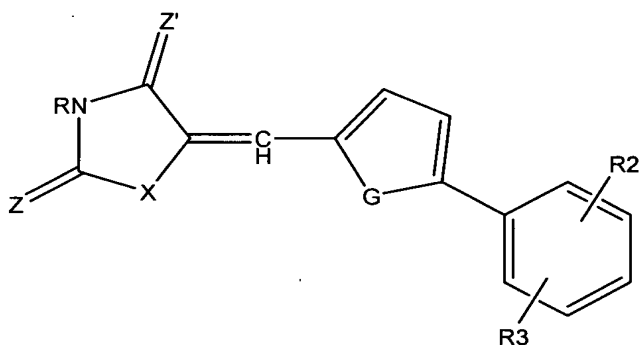
- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

79. (New) The method of claim 78, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an

unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

80. (New) The method of claim 78, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

81. (New) A method of inhibiting 15-hydroxyprostaglandin dehydrogenase in a subject in need of same, said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of the formula:



or of one of its salts, in which:

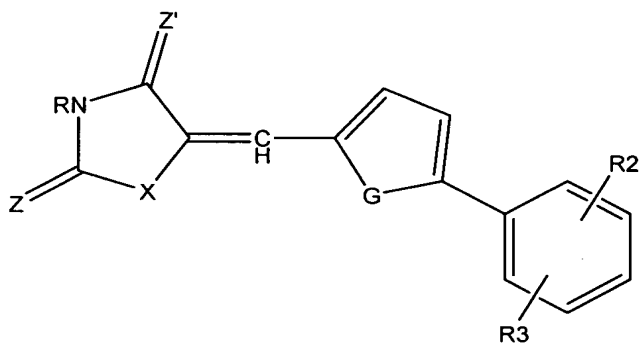
- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl

radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

82. (New) The method of claim 81, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

83. (New) The method of claim 81, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

84. (New) A method of reducing hair loss and/or increasing hair density and/or treating androchronogenetic alopecia and/or treating alopecia of natural origin in a subject in need of same; said method comprising applying to said subject a cosmetic or pharmaceutical composition comprising an effective amount of at least one heterocyclic compound of the formula:



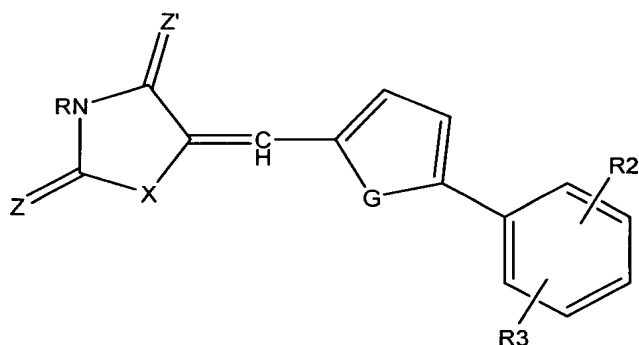
or of one of its salts, in which:

- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

85. (New) The method of claim 84, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

86. (New) The method of claim 84, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

87. (New) A method of inducing and/or stimulating the growth of eyelashes and/or increasing the density of eyelashes in a subject in need of same; said method comprising applying to said subject a cosmetic composition comprising an effective amount at least one heterocyclic compound of the formula:



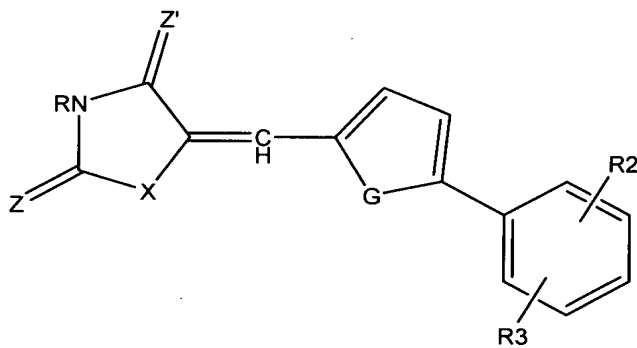
or of one of its salts, in which:

- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

88. (New) The method of claim 87, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

89. (New) The method of claim 87, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

90. (New) A method for improving the condition and/or appearance of human eyelashes in a subject in need of same, said method comprising applying to the eyelashes and/or eyelids of said subject a mascara composition comprising at least one compound of the formula:



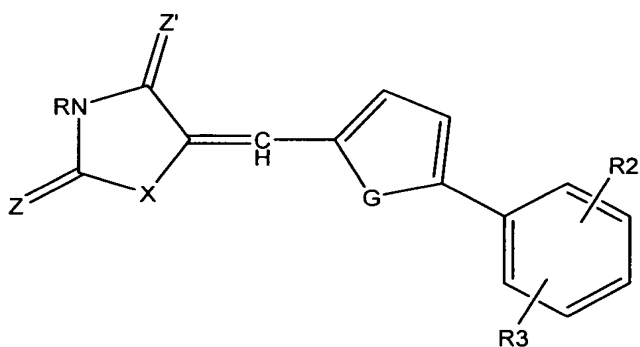
or of one of its salts, in which:

- Z and Z' independently represent S or O,
 - X independently represents S or O or NH,
 - R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
 - G represents O or S;
 - R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical,
- and leaving this composition in contact with the eyelashes and/or eyelids.

91. (New) The method of claim 90, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

92. (New) The method of claim 90, wherein at least one of R_2 and R_3 represent, independently of each other, a hydrogen, CN, NO_2 , CF_3 , phenyl, an OR_0 , a COOR_0 radical, a saturated linear or branched $\text{C}_1\text{-C}_{10}$ alkyl radical or an unsaturated linear or branched $\text{C}_1\text{-C}_{10}$ alkyl radical optionally substituted by OR_0 , where R_0 denotes a hydrogen or a linear or branched $\text{C}_1\text{-C}_{10}$ alkyl radical.

93. (New) A method for improving the condition and/or appearance of human scalp in a subject in need of same, said method comprising applying to the hair and/or the scalp of said subject a cosmetic composition comprising an effective amount of at least one compound of the formula:



or of one of its salts, in which:

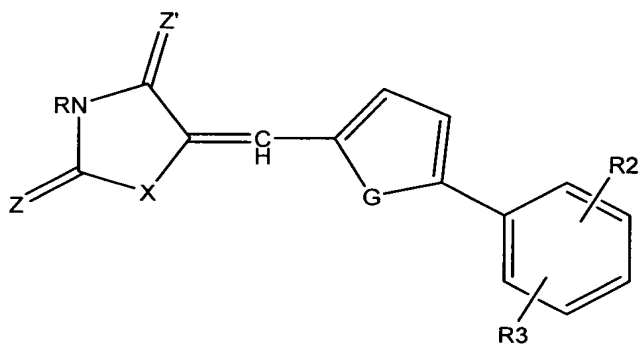
- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched $\text{C}_1\text{-C}_{10}$ alkyl radical;
- G represents O or S;
- R_2 and R_3 represent, independently of each other, a hydrogen, CN, NO_2 , CF_3 , phenyl, an OR_0 , a COOR_0 radical, a saturated linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, or an unsaturated linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, where R_0 denotes a hydrogen or a linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical,

and leaving this composition in contact with the hair and/or the scalp and optionally rinsing the hair and/or the scalp.

94. (New) The method of claim 93, wherein at least one of R_2 and R_3 represent, independently of each other, a hydrogen, CN, NO_2 , CF_3 , phenyl, an OR_0 , a $COOR_0$ radical, a saturated linear or branched C_1 - C_{10} alkyl radical or an unsaturated linear or branched C_1 - C_{10} alkyl radical optionally substituted by OR_0 , where R_0 denotes a hydrogen, a linear or branched C_1 - C_{20} alkyl radical.

95. (New) The method of claim 93, wherein at least one of R_2 and R_3 represent, independently of each other, a hydrogen, CN, NO_2 , CF_3 , phenyl, an OR_0 , a $COOR_0$ radical, a saturated linear or branched C_1 - C_{10} alkyl radical or an unsaturated linear or branched C_1 - C_{10} alkyl radical optionally substituted by OR_0 , where R_0 denotes a hydrogen or a linear or branched C_1 - C_{10} alkyl radical.

96. (New) A method of preserving the amount and/or the activity of prostaglandins in the hair follicle in a subject in need of same, said method comprising applying to the skin and/or hair of said subject a cosmetic composition comprising an effective amount of at least one heterocyclic compound of the formula:



or of one of its salts, in which:

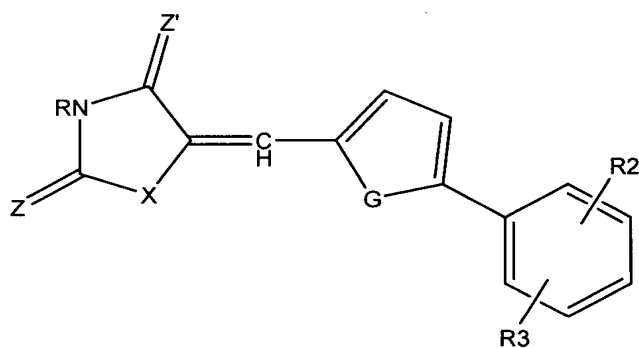
- Z and Z' independently represent S or O,
- X independently represents S or O or NH,

- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

97. (New) The method of claim 96, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

98. (New) The method of claim 96, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

99. (New) A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of the formula:



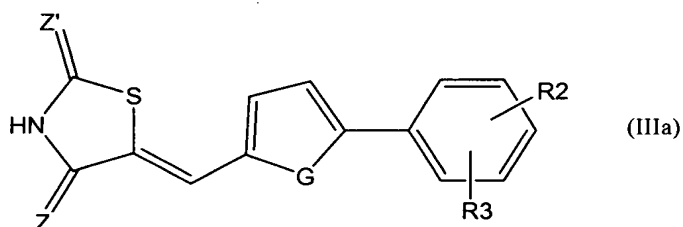
or of one of its salts, in which:

- Z and Z' independently represent S or O,
- X independently represents S or O or NH,
- R denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical;
- G represents O or S;
- R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₂₀ alkyl radical, or an unsaturated linear or branched C₁-C₂₀ alkyl radical, where R₀ denotes a hydrogen or a linear or branched C₁-C₂₀ alkyl radical.

100. (New) The method of claim 99, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen, a linear or branched C₁-C₂₀ alkyl radical.

101. (New) The method of claim 99, wherein at least one of R₂ and R₃ represent, independently of each other, a hydrogen, CN, NO₂, CF₃, phenyl, an OR₀, a COOR₀ radical, a saturated linear or branched C₁-C₁₀ alkyl radical or an unsaturated linear or branched C₁-C₁₀ alkyl radical optionally substituted by OR₀, where R₀ denotes a hydrogen or a linear or branched C₁-C₁₀ alkyl radical.

102. (New) The method of claim 4 wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



in which Z, Z' and G independently represent O or S; and at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₂₀ alkyl radical.

103. (New) The method of claim 4, wherein the compound of formula (I) is selected from the group consisting of:

